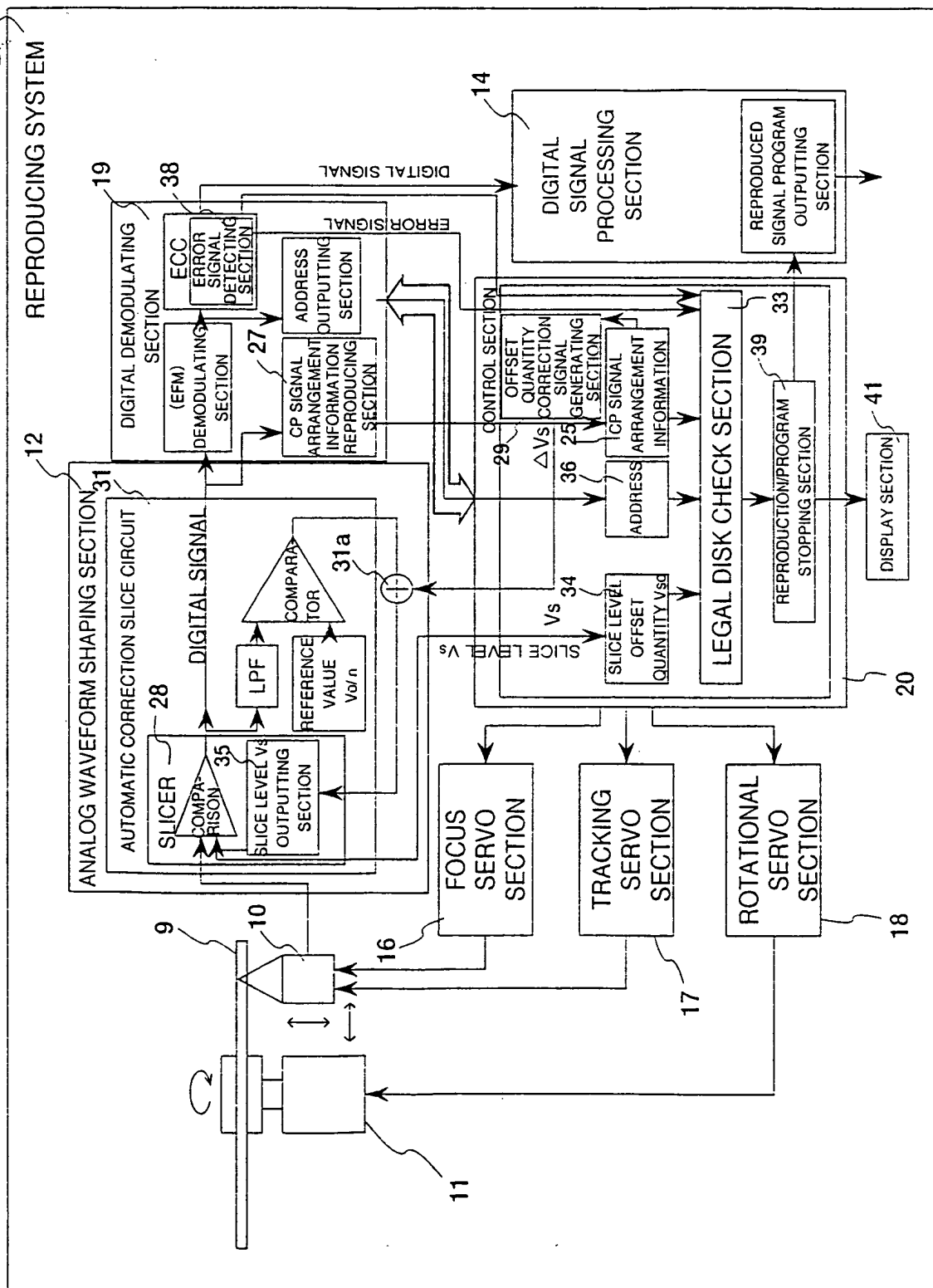


FIG. 1



IN THE CASE OF DUTY RATIO=50%: PERIOD

FIG. 2a

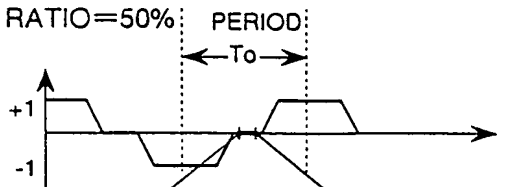
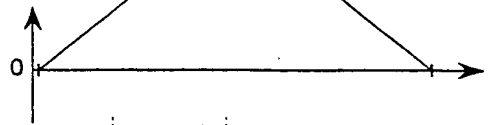
WAVEFORM (1) DUTY RATIO
CONTROL SIGNAL

FIG. 2b

WAVEFORM (2) ASYMMETRY
SIGNAL
AT DUTY RATIO=50%

WAVEFORM (3) RECORD WAVE FORM

FIG. 2c

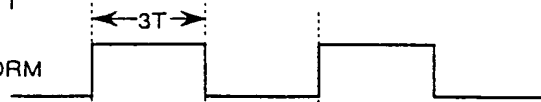


FIG. 2d (4) RECORD PIT

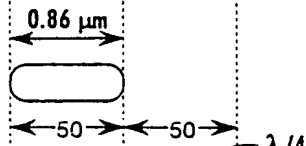
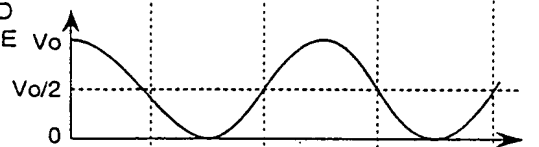
FIG. 2e (5) TRANSVERSE
CROSS SECTIONWAVEFORM (6) REPRODUCED
WAVEFORM BEFORE
SLICE

FIG. 2f



WAVEFORM (7) SLICE LEVEL

FIG. 2g

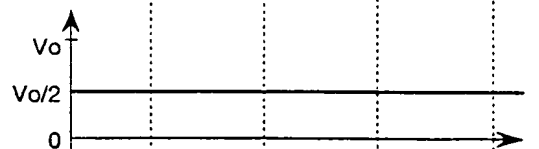
WAVEFORM (8) REPRODUCED
DIGITAL WAVEFORM

FIG. 2h

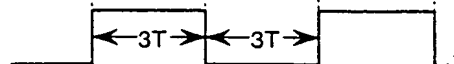
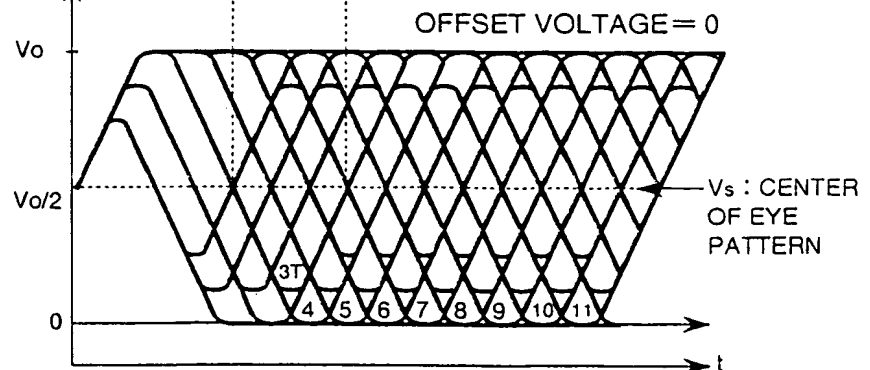
WAVEFORM (9) EYE
PATTERN

FIG. 2i



IN THE CASE OF DUTY RATIO < 50%

FIG. 3a

WAVEFORM (1) DUTY
RATIO CONTROL
SIGNAL

WAVEFORM (2) DUTY RATIO

FIG. 3b

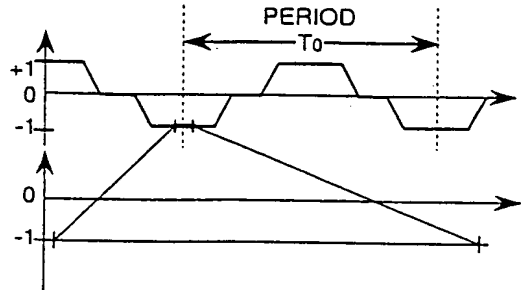


FIG. 3c

WAVEFORM (3) RECORD WAVEFORM

FIG. 3d

(4) RECORD PIT

(5) TRANSVERSE CROSS
SECTION

FIG. 3e

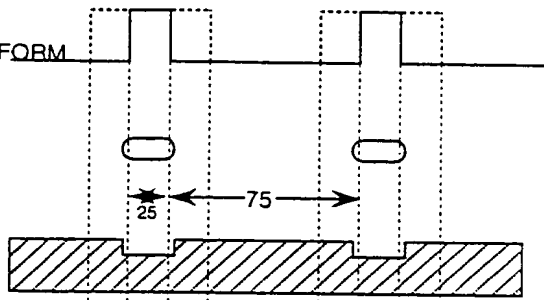
WAVEFORM (6) REPRODUCED
WAVEFORM BEFORE
SLICE

FIG. 3f



WAVEFORM (7) SLICE LEVEL

FIG. 3g

(CP SIGNAL)

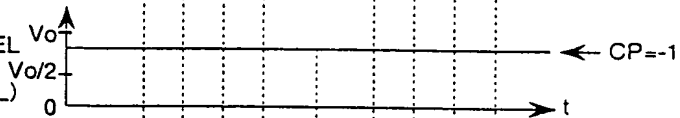
WAVEFORM (8) REPRODUCED
DIGITAL WAVEFORM

FIG. 3h

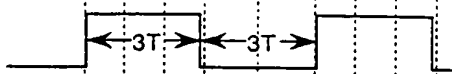
WAVEFORM (9) EYE
PATTERN

FIG. 3i

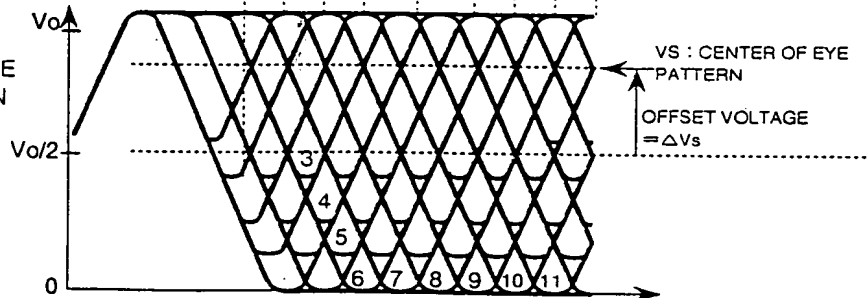


FIG. 4

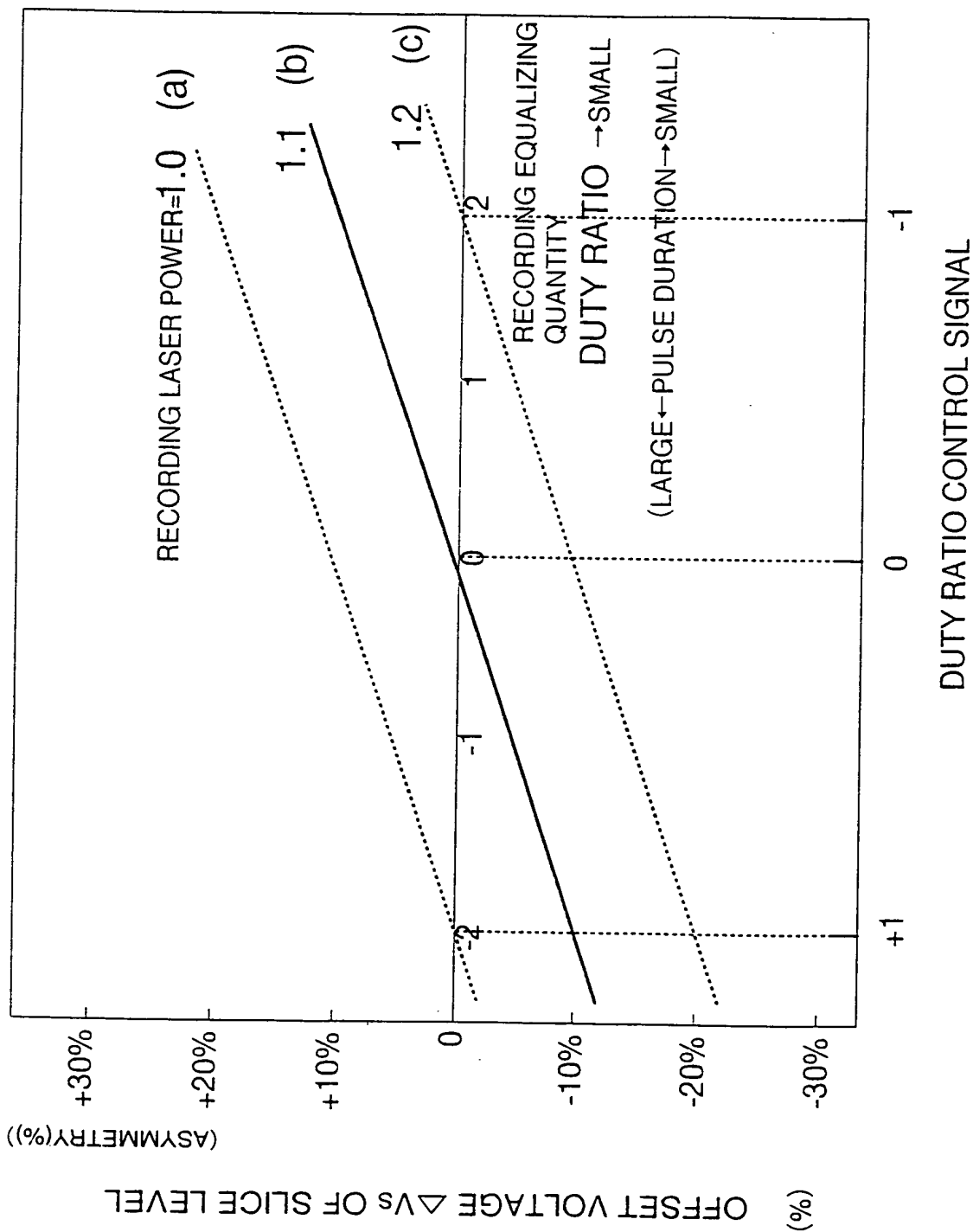
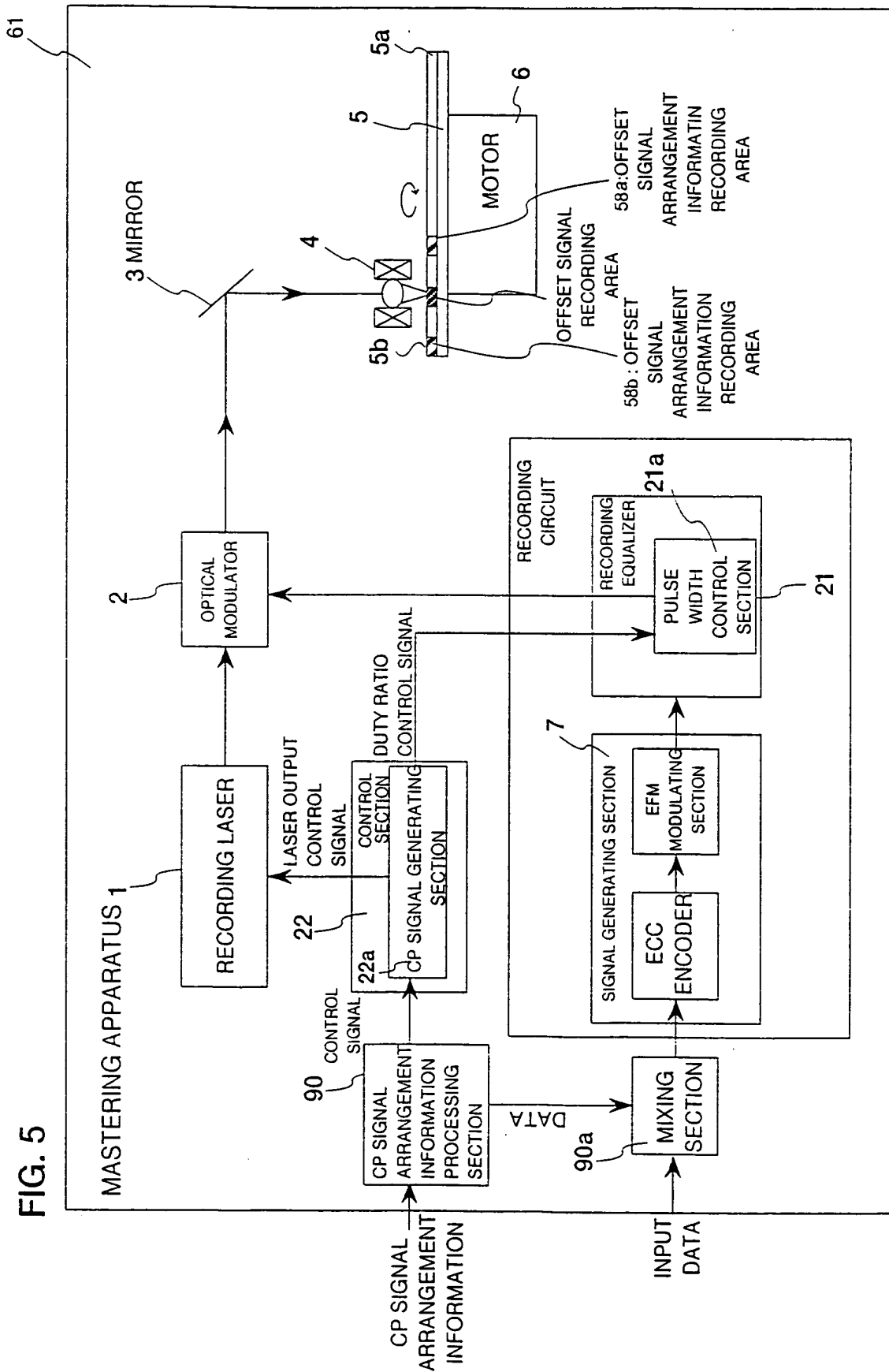


FIG. 5



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FIG. 6

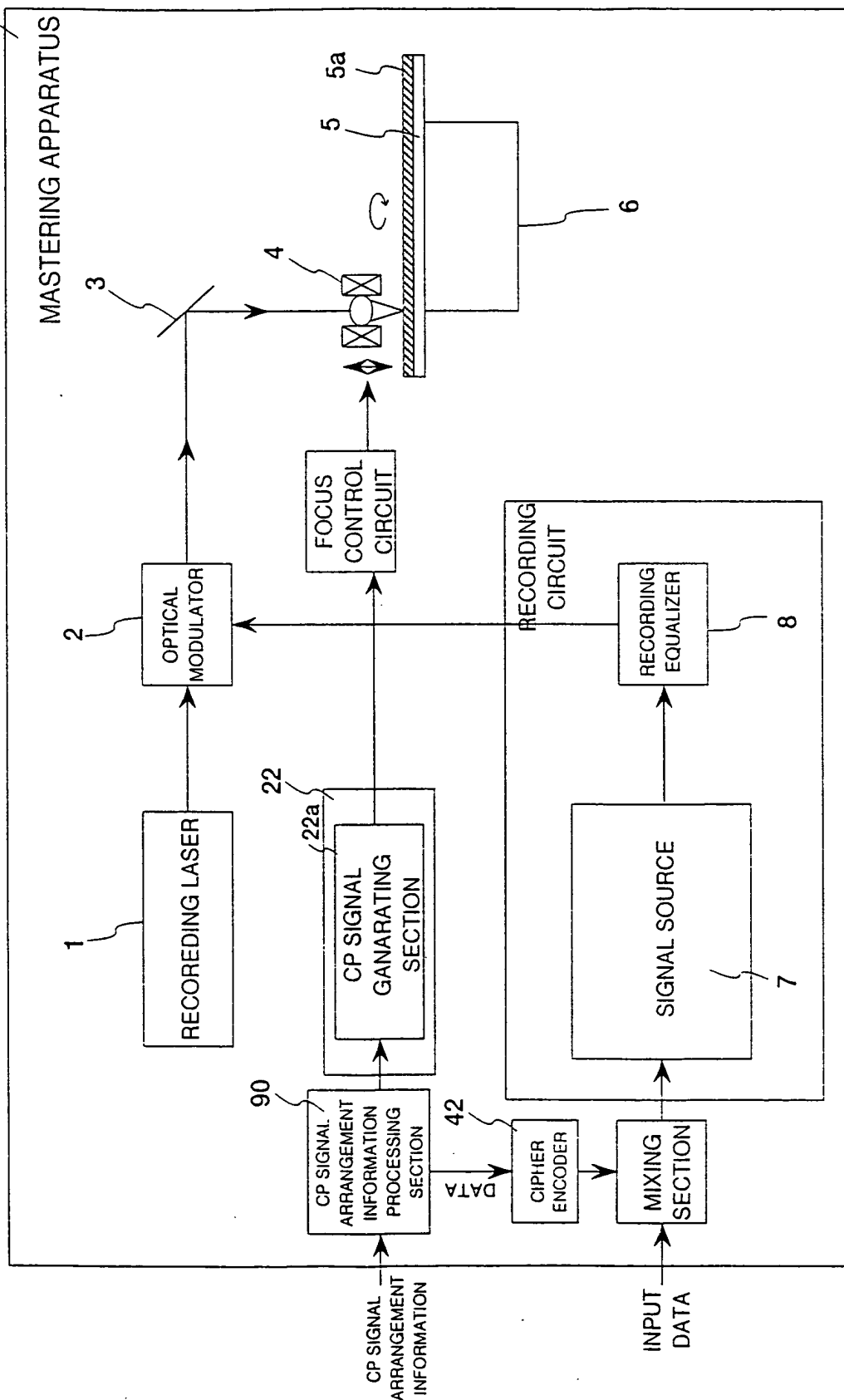
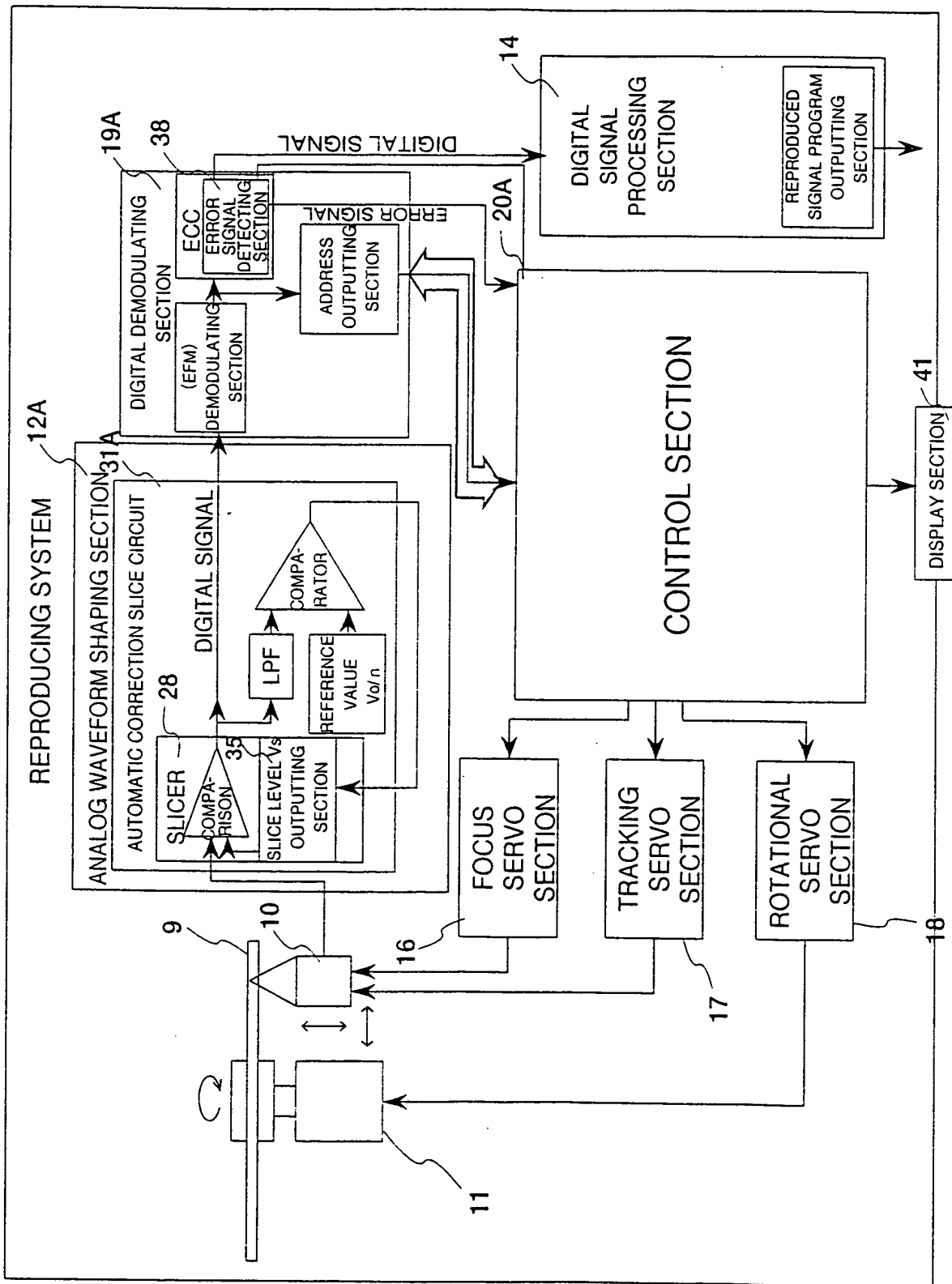


FIG. 7



005160" 4E-4-960

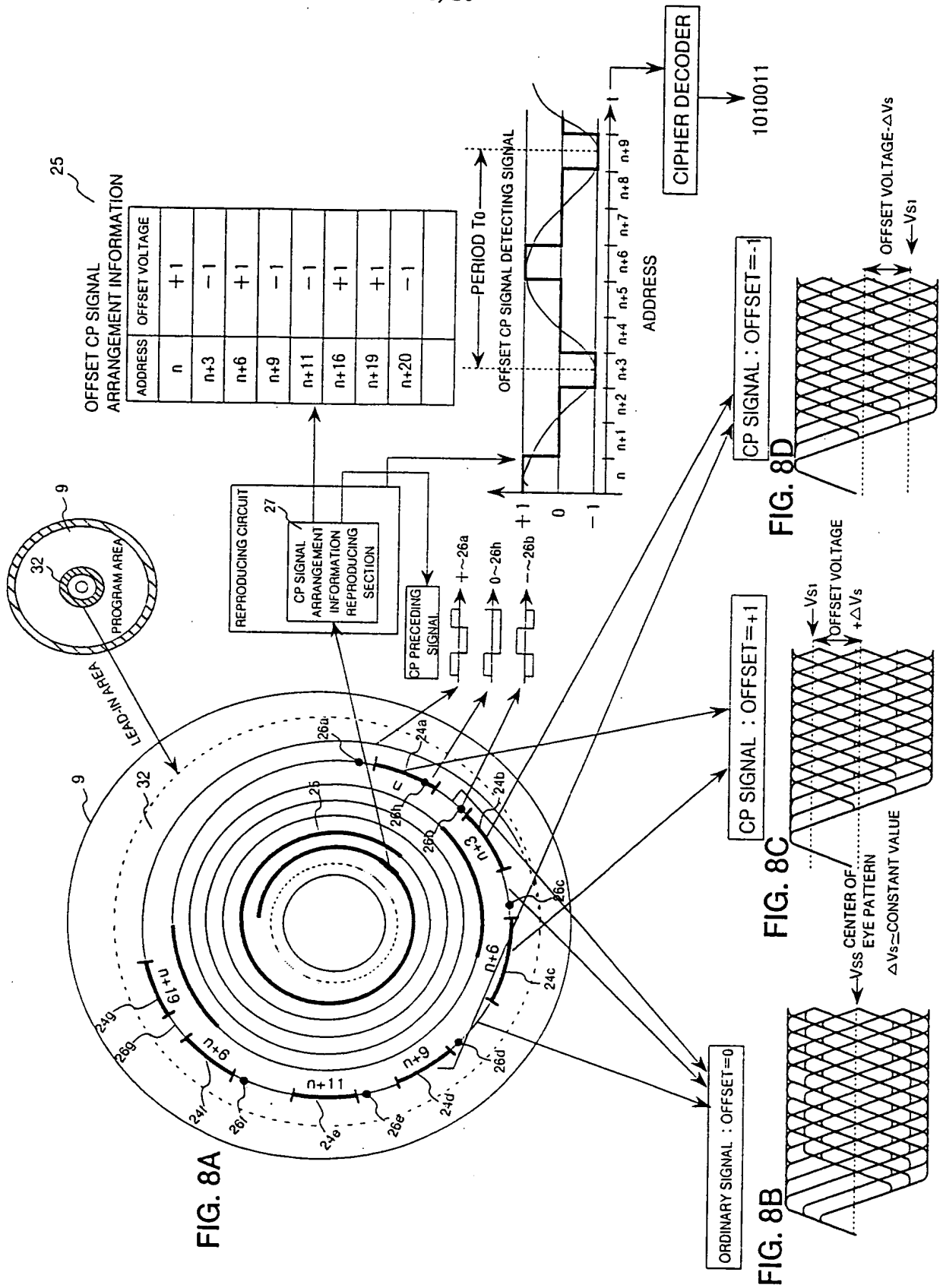


FIG. 9A

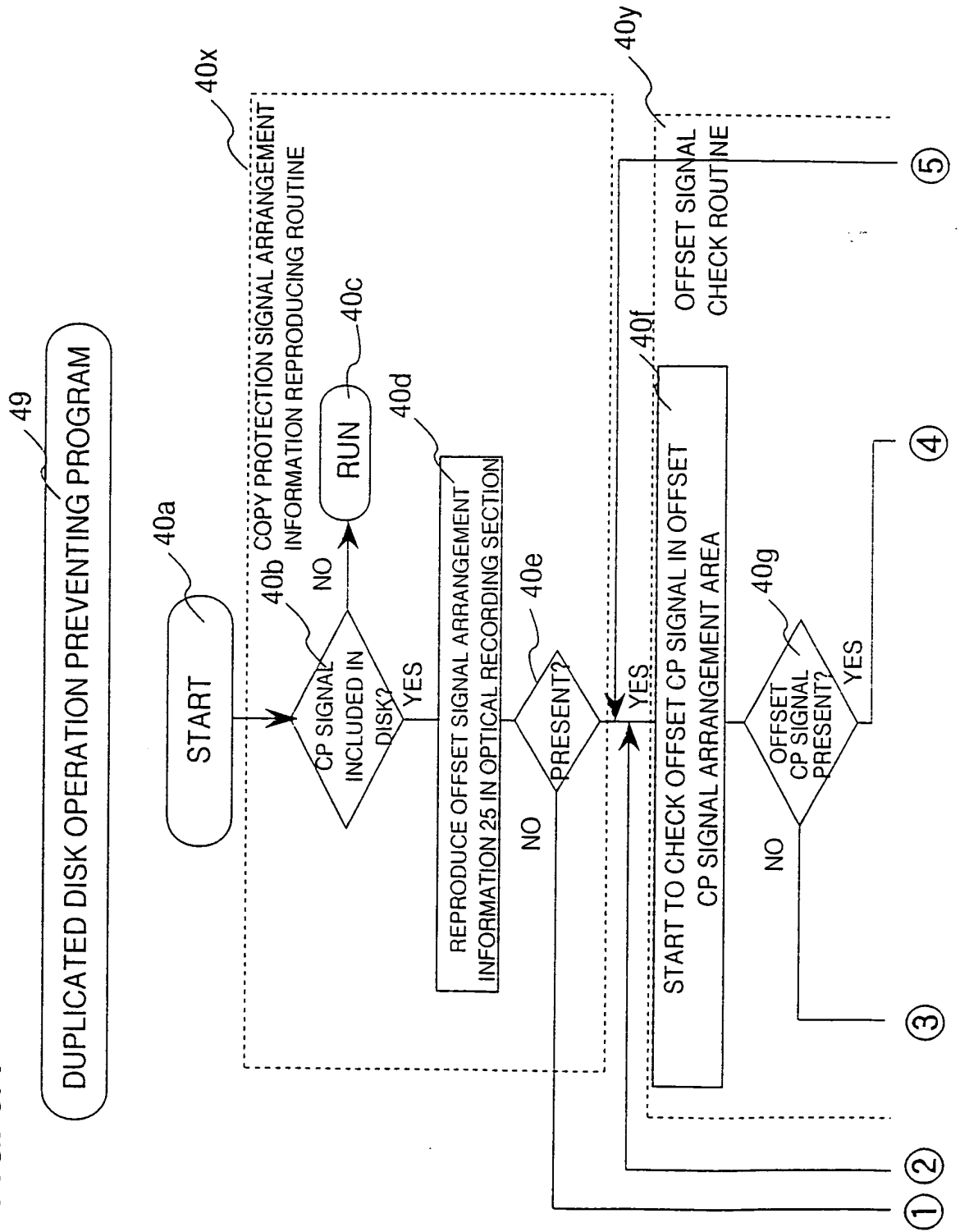
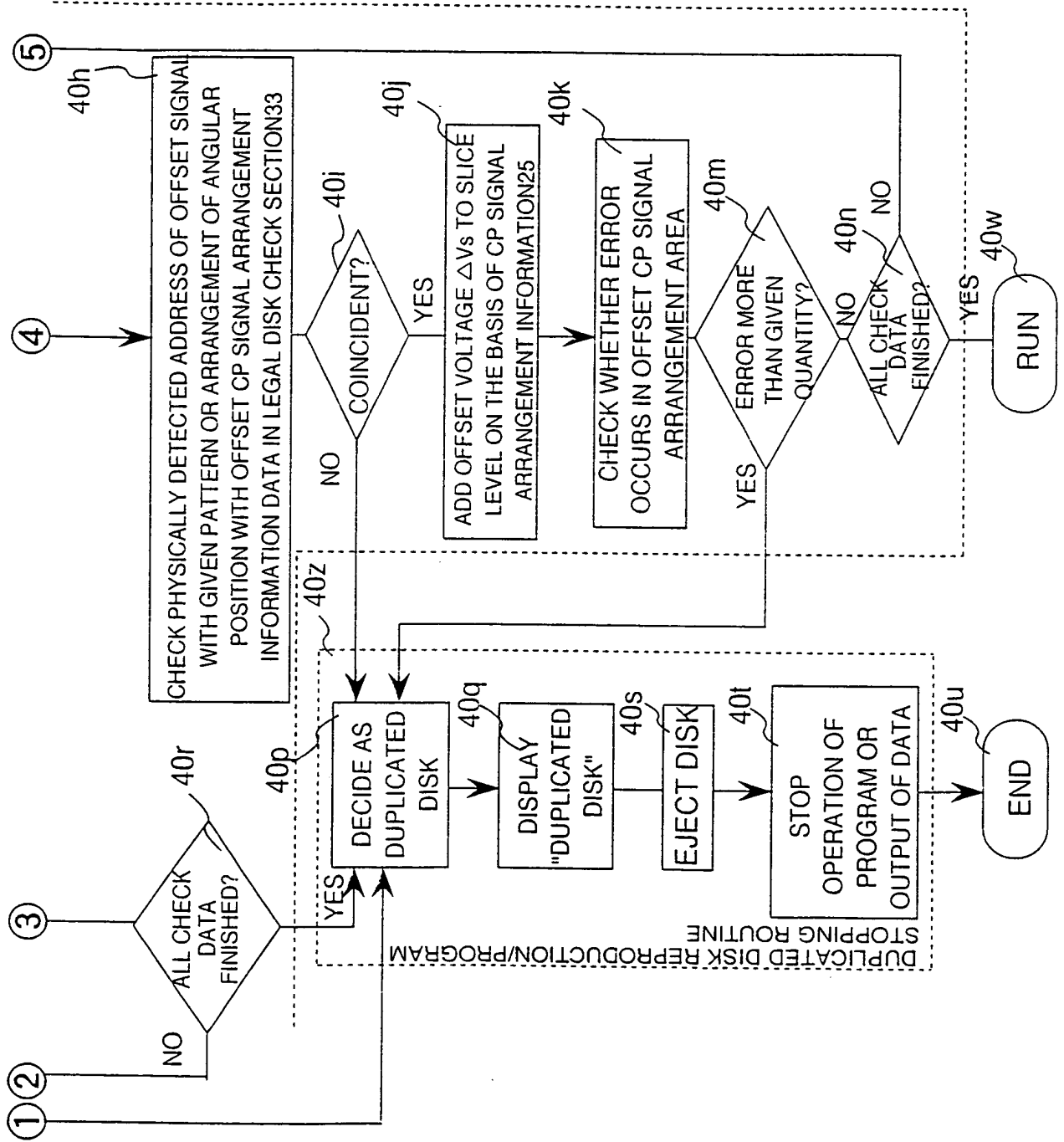


FIG. 9B



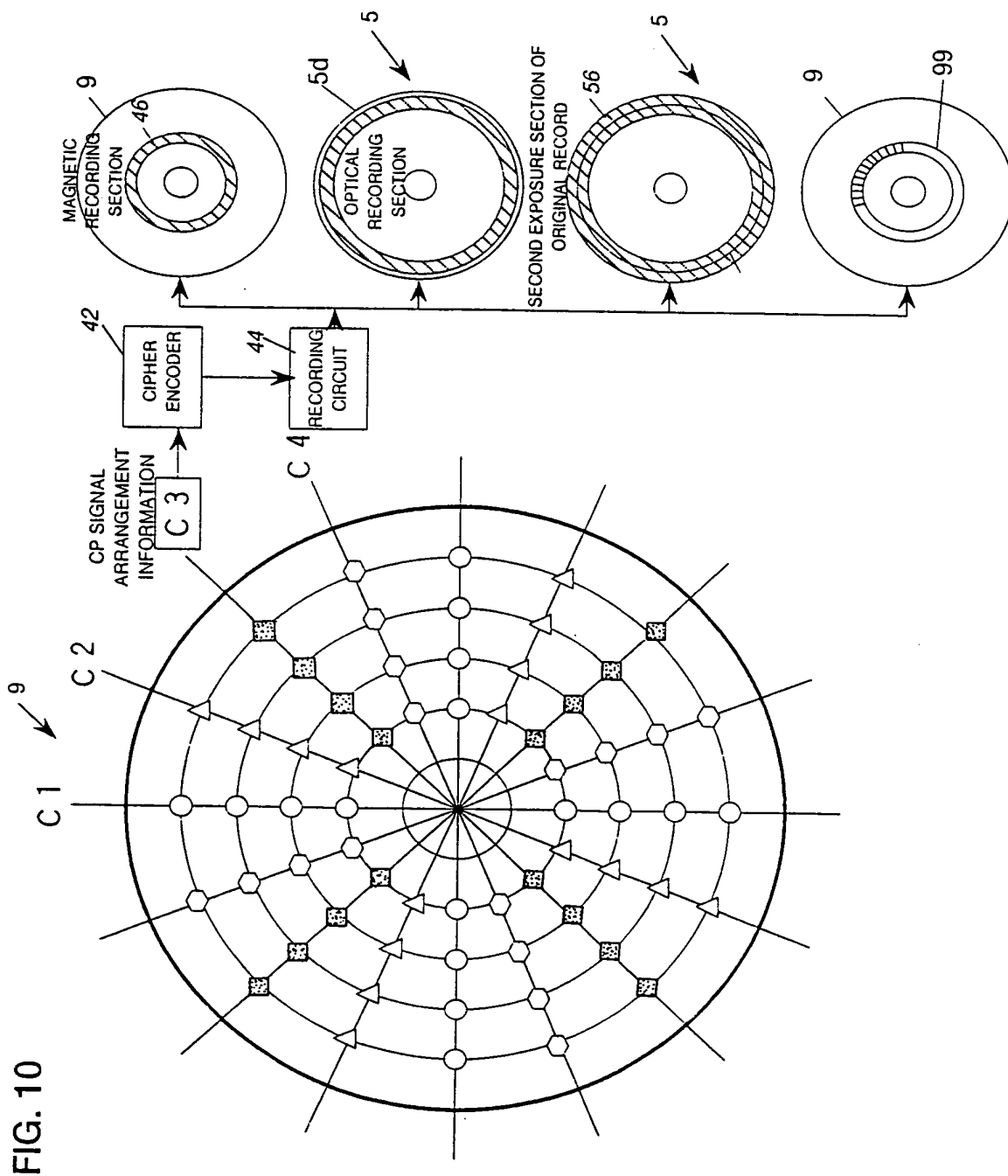


FIG. 11

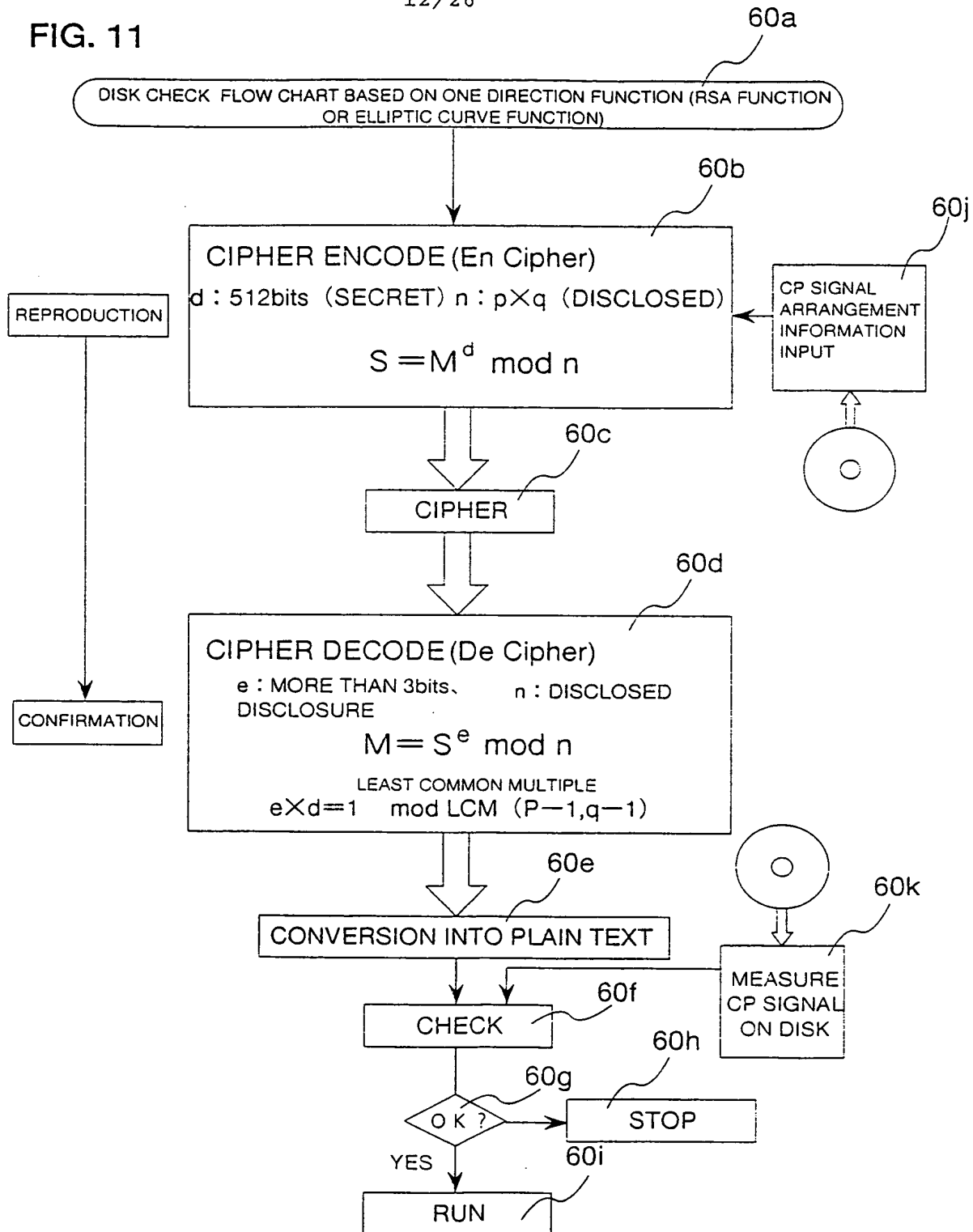


FIG. 12

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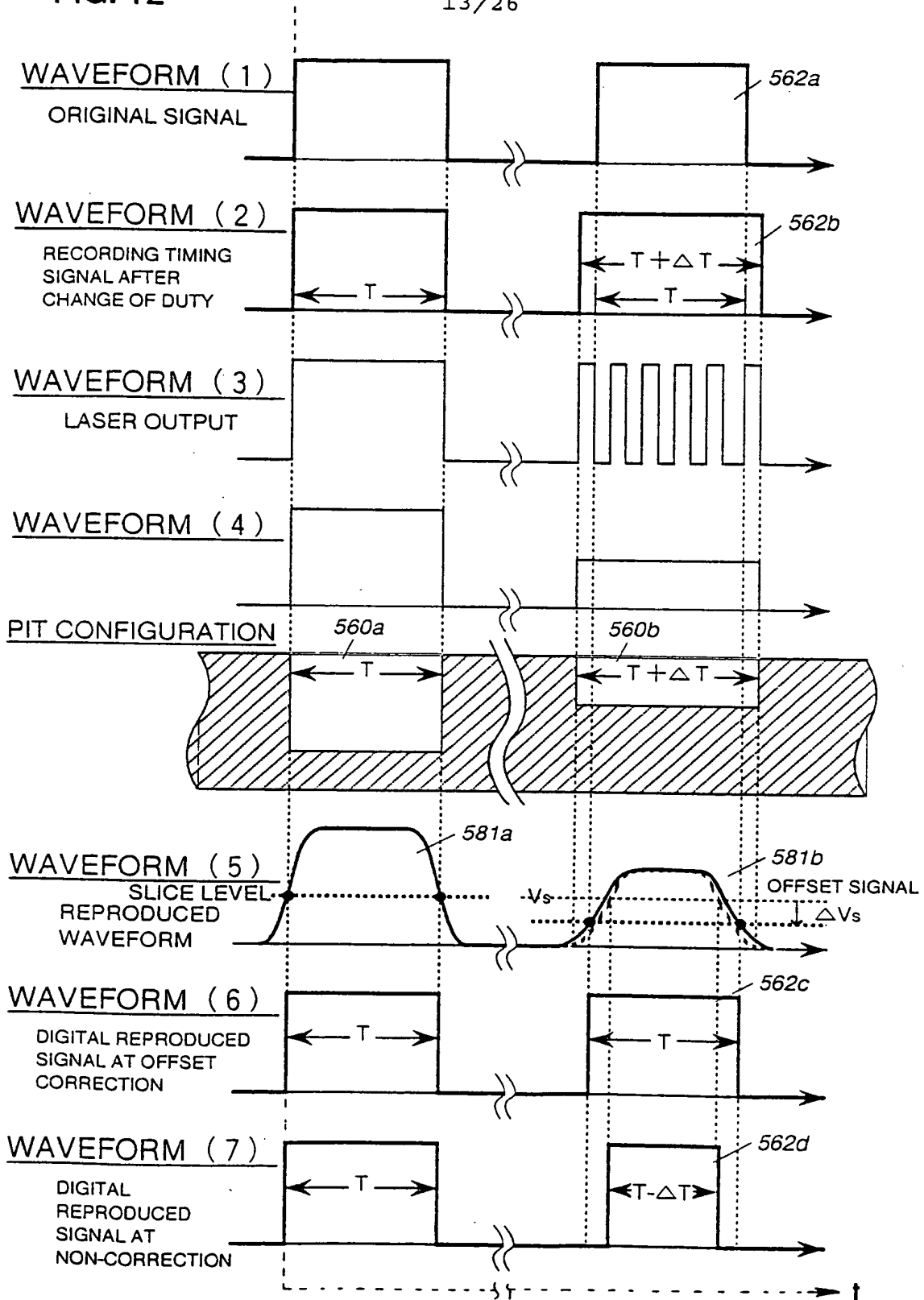


FIG. 13A

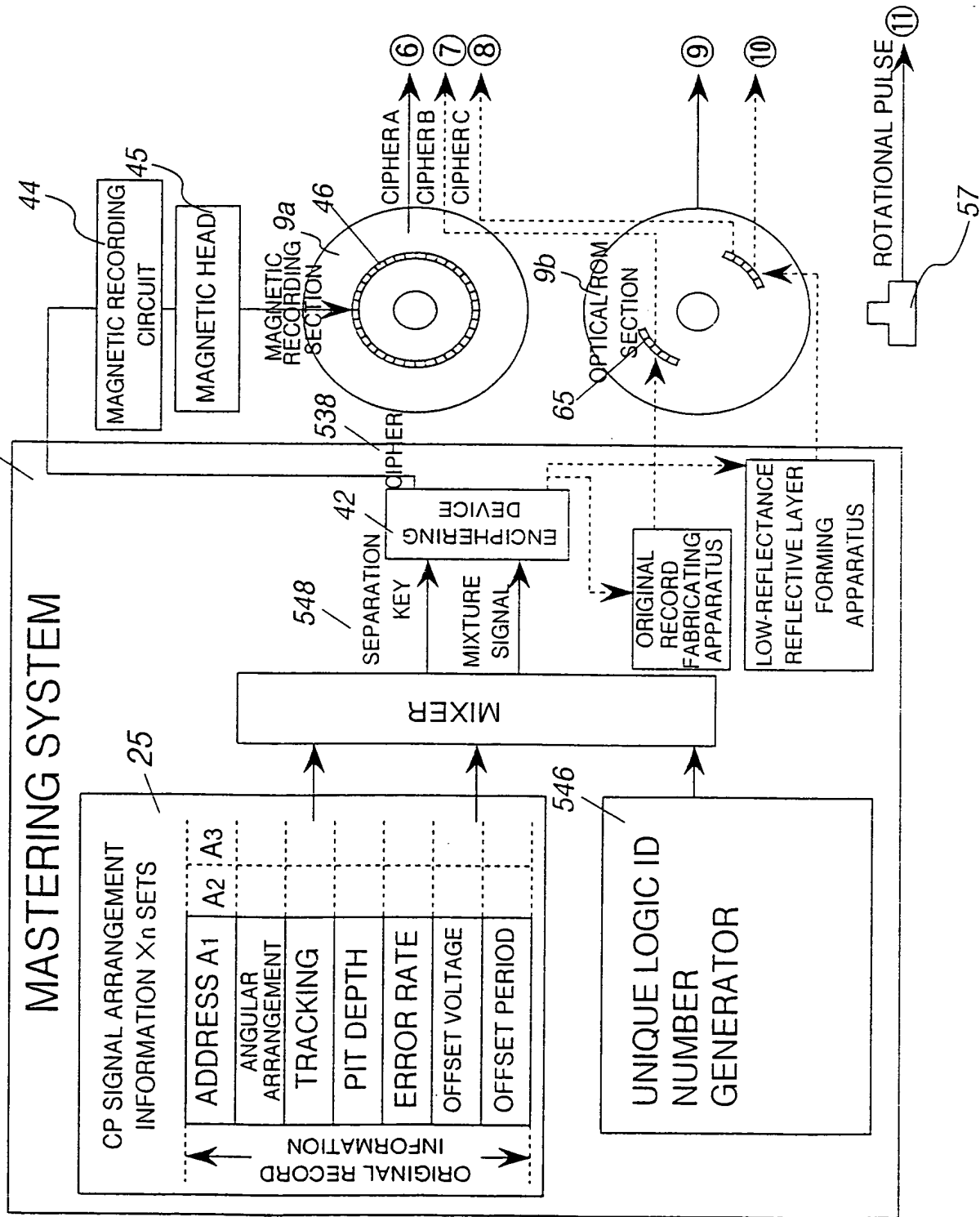


FIG. 13B

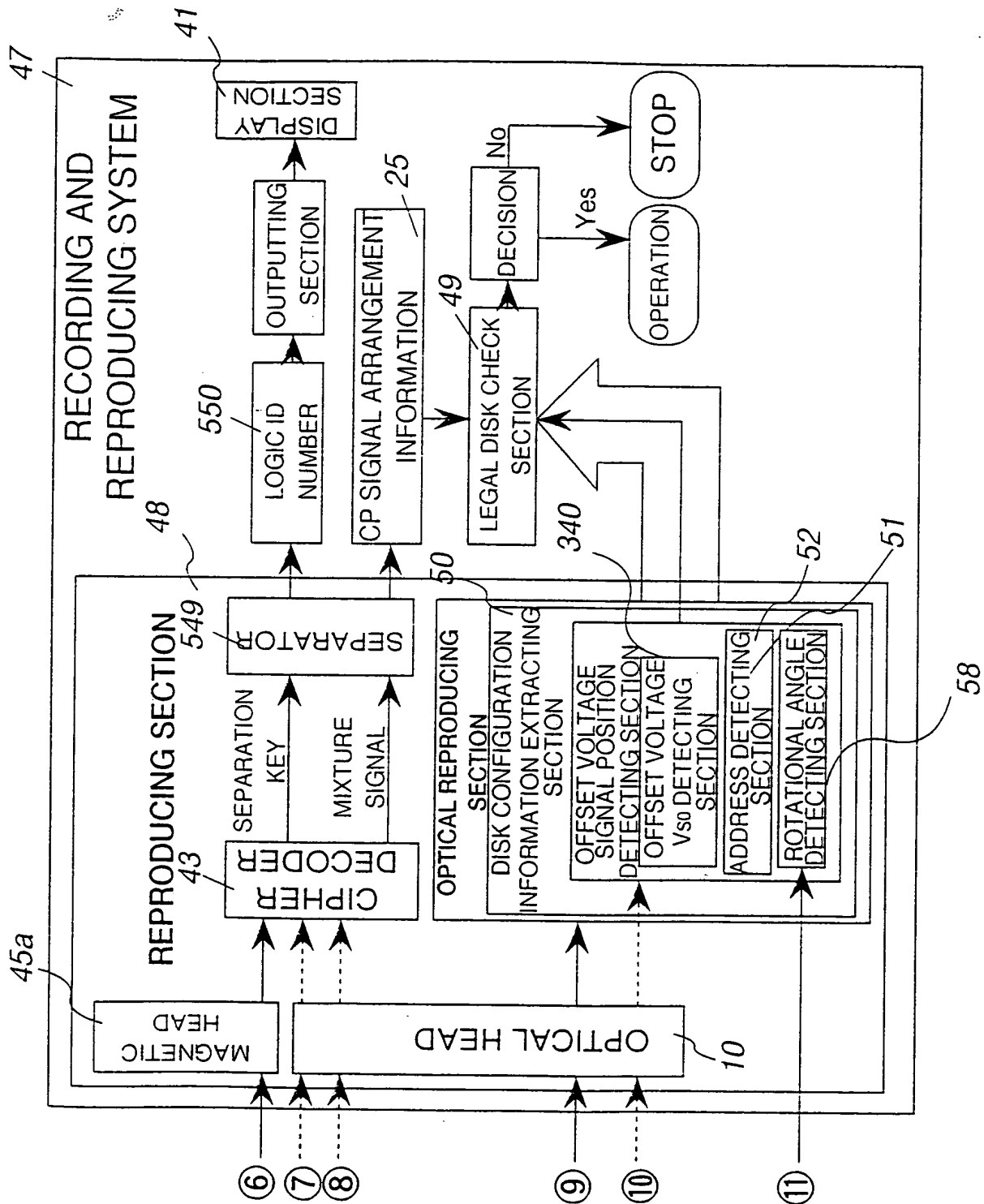


FIG. 14A

PROCESS DIAGRAM IN ONE-PIECE ORIGINAL RECORD TWO-DIVISION RECORDING SYSTEM

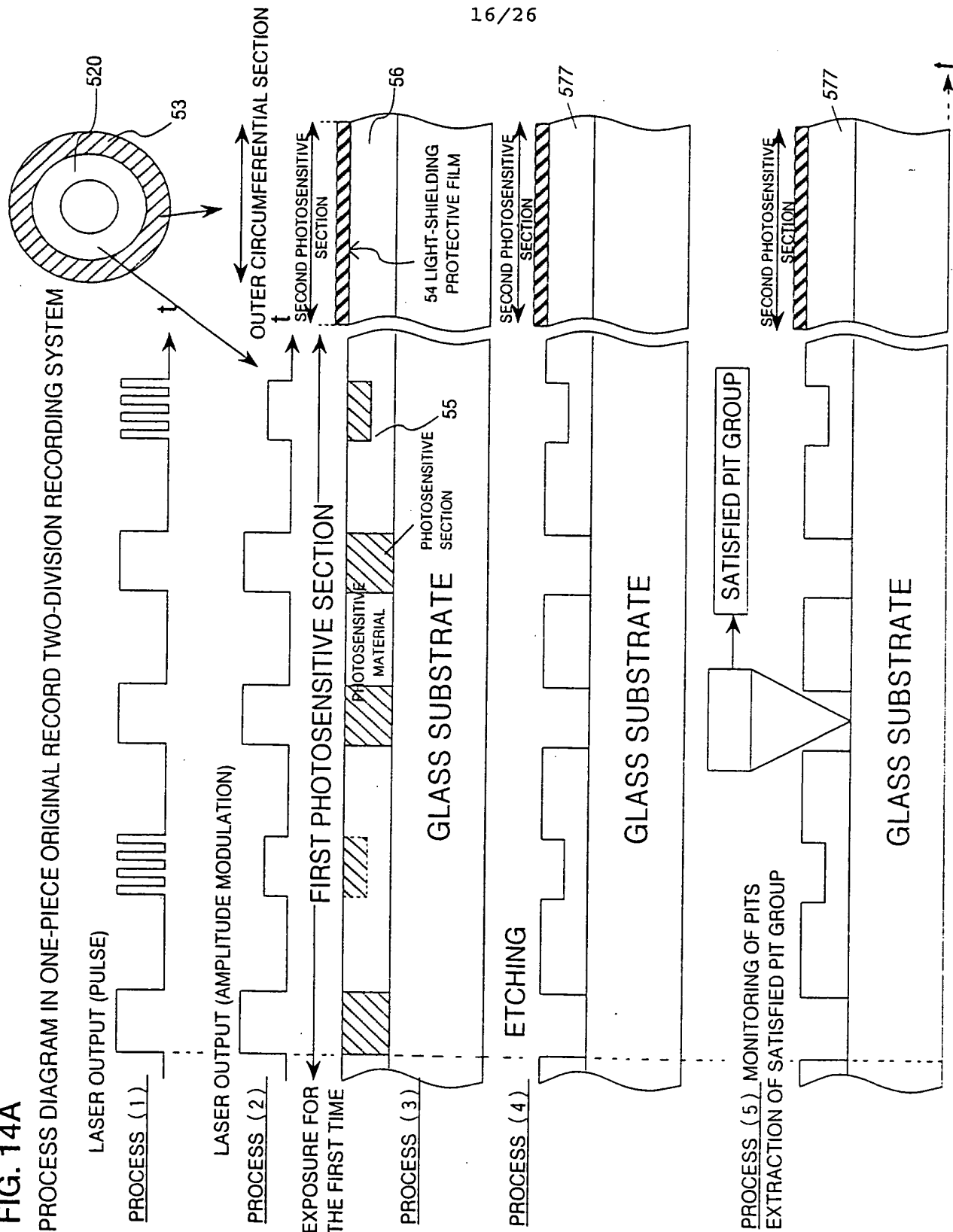
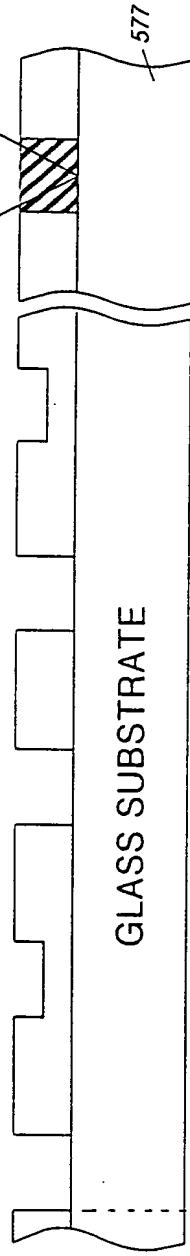


FIG. 14B

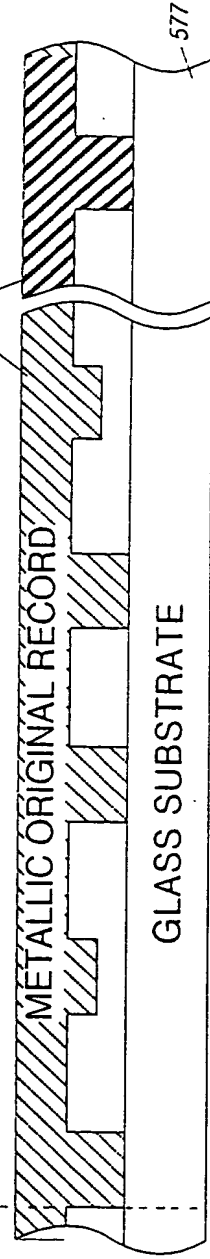
OFFSET CP SIGNAL ARRANGEMENT INFORMATION

PROCESS (6) RECORDING TO SECOND RECORDING SECTION OF ORIGINAL RECORD : PHYSICAL
FEATURE OF SATISFIED PIT GROUP
(ANGULAR POSITION OR/AND, RADIUS POSITION OR/AND, ADDRESS OR/AND, OFFSET SIGNAL
OR/AND, PIT DEPTH)

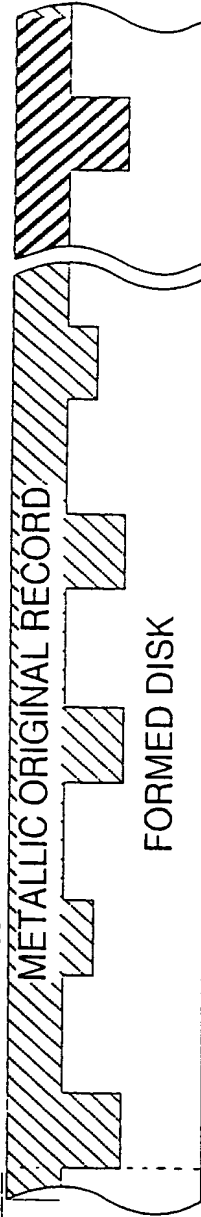
EXPOSURE FOR THE SECOND TIME



PROCESS (7) PLATING PROCESS FOR FABRICATION OF ORIGINAL RECORD



PROCESS (8) FORMATION PROCESS



PROCESS (9) MEASUREMENT OF REPRODUCED SIGNAL -> EXTRACTION OF SATISFIED PIT GROUP REFLECTIVE FILM

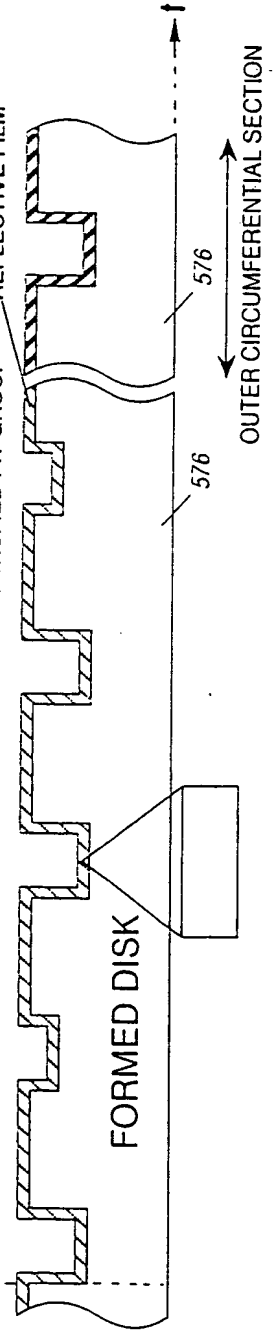
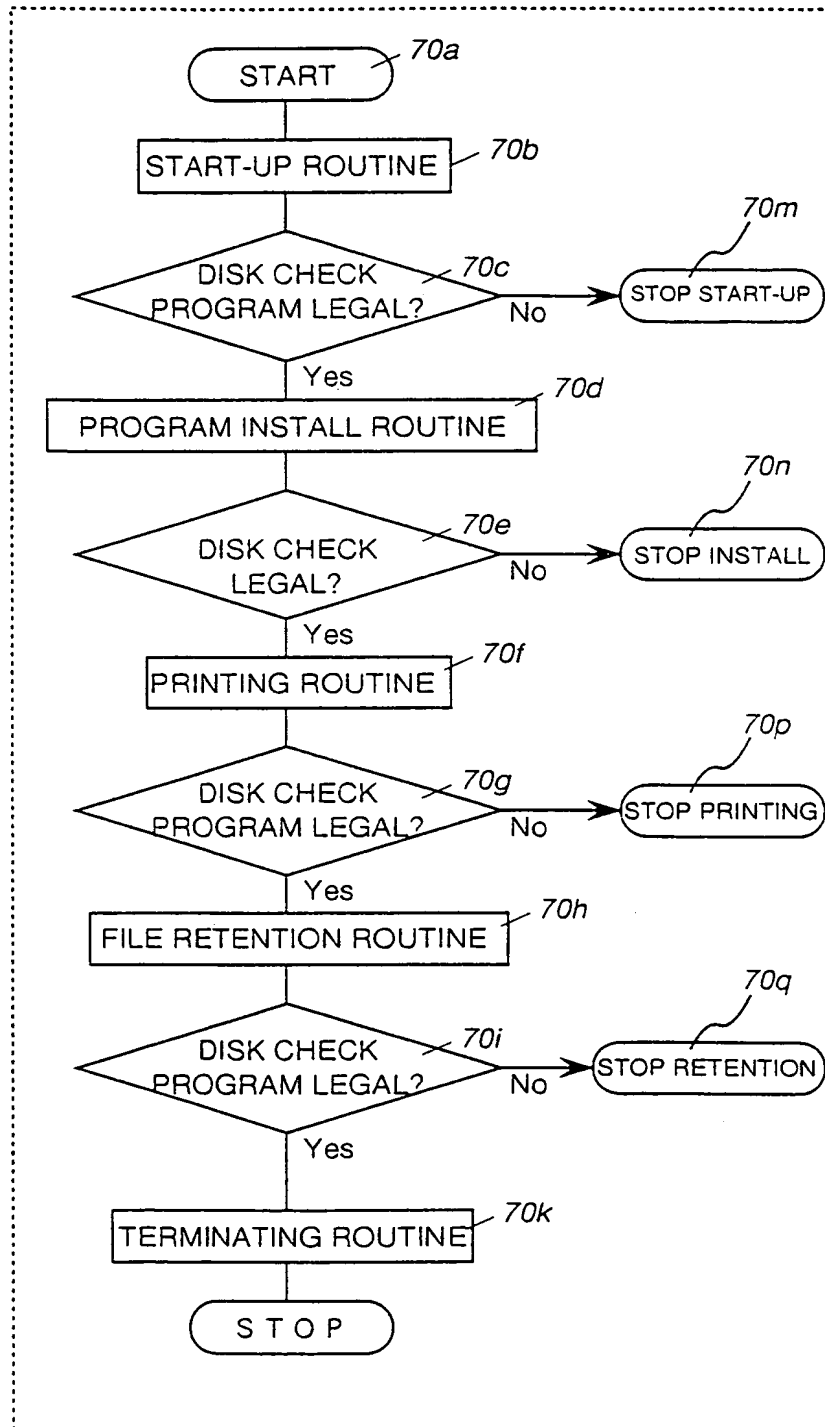


FIG. 15

APPLICATION SOFTWARE PROGRAM



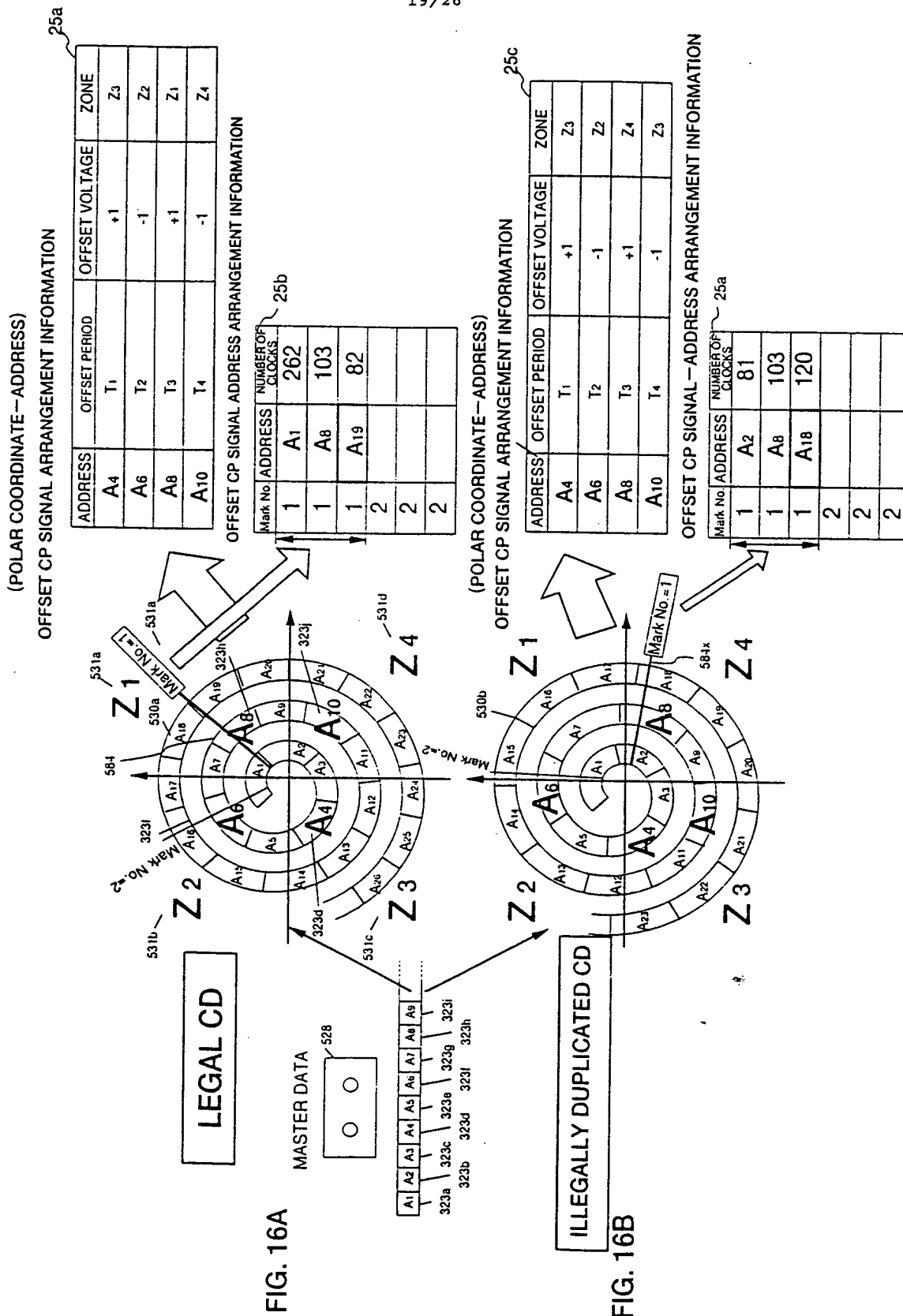
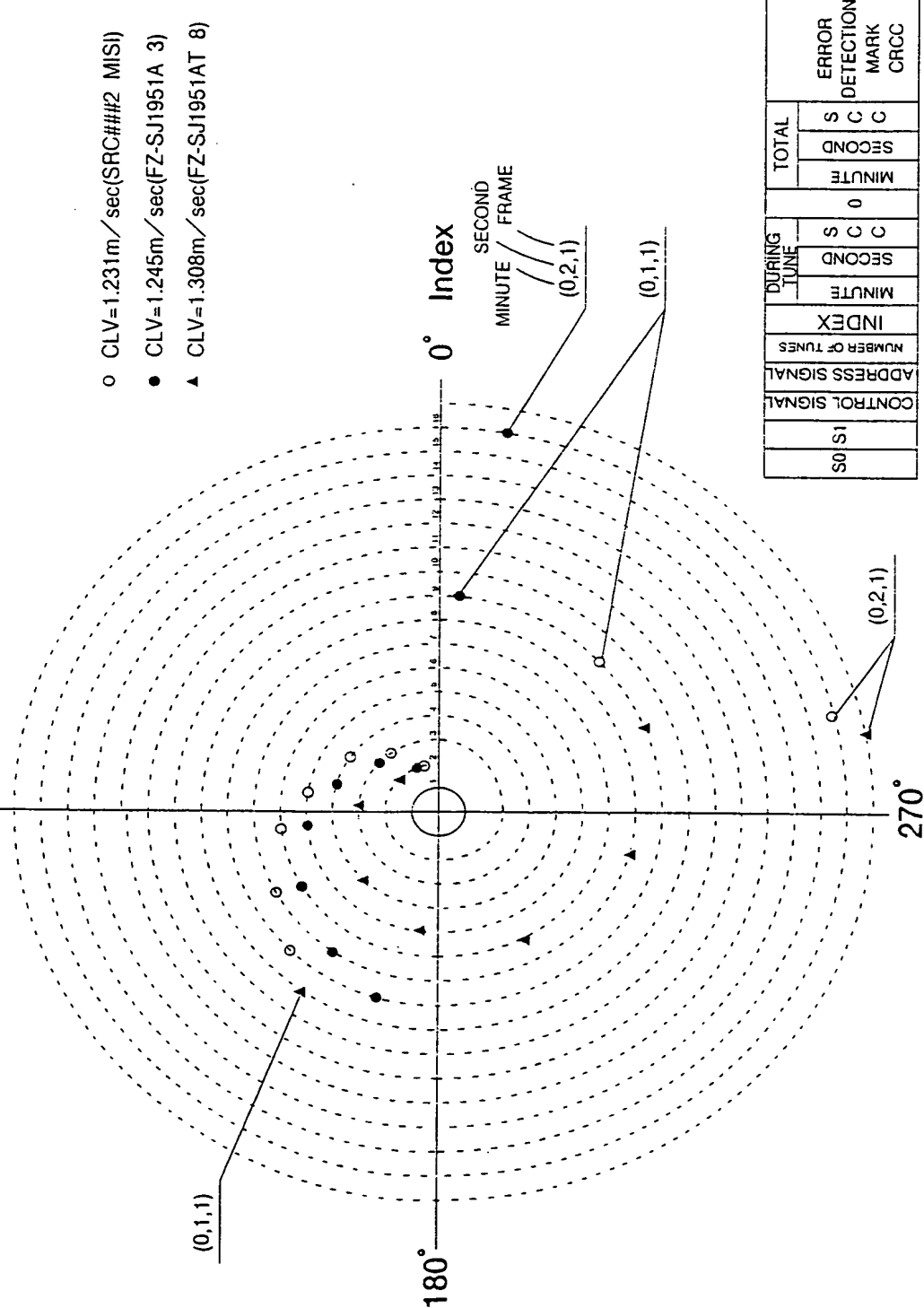


FIG. 17

90° ADDRESS POSITION OF FRAME IN EACH MEDIUM



S01	CONTROL SIGNAL	ADDRESS SIGNAL	NUMBER OF TUNES	INDEX			DURING TUNE	0	TOTAL			ERROR DETECTION MARK CRC
				MINUTE	SECOND	S						
				MINUTE	SECOND	S						
				MINUTE	SECOND	S						

FIG. 18
RELATIVE POSITION DETECTING MEANS

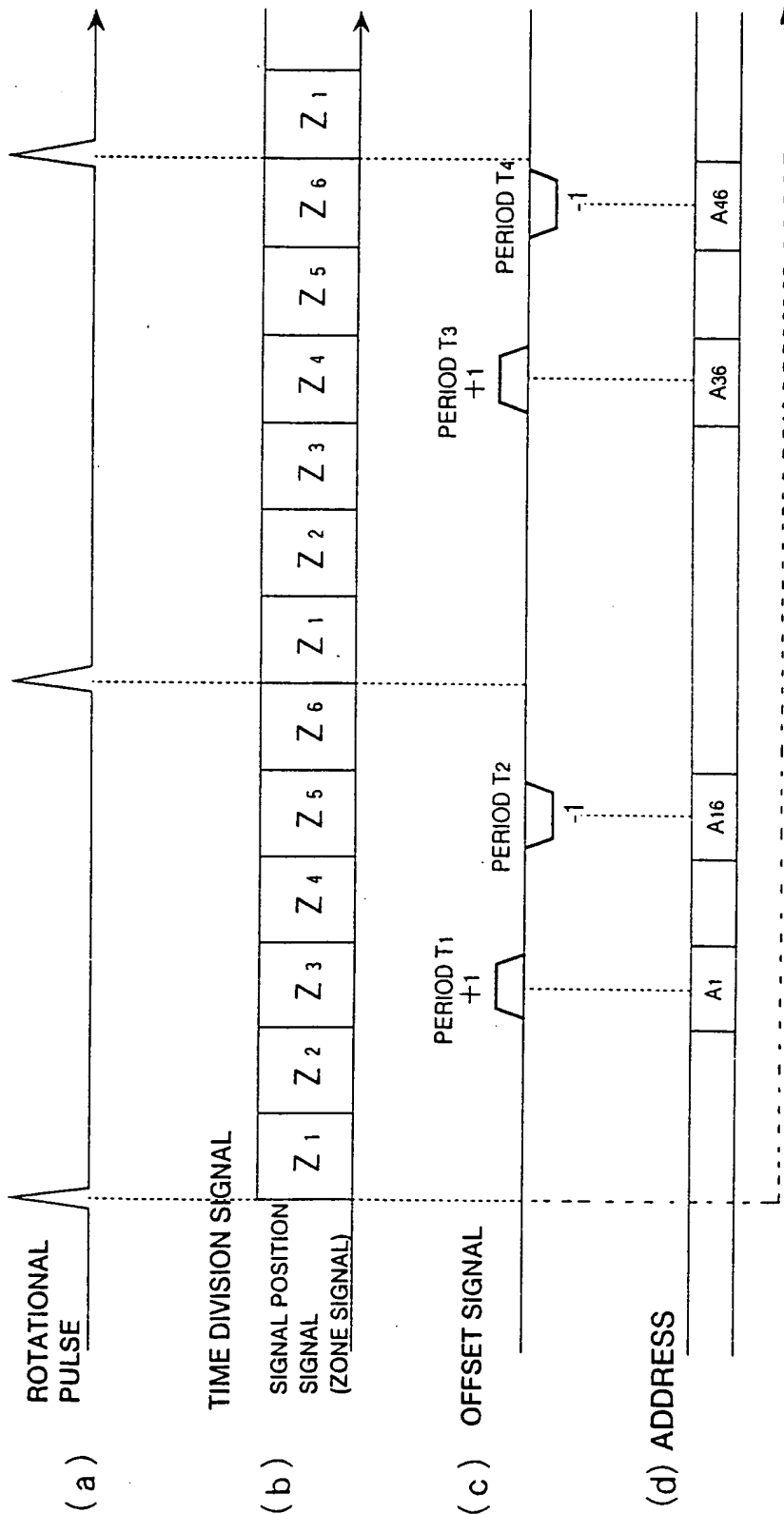


FIG. 19A

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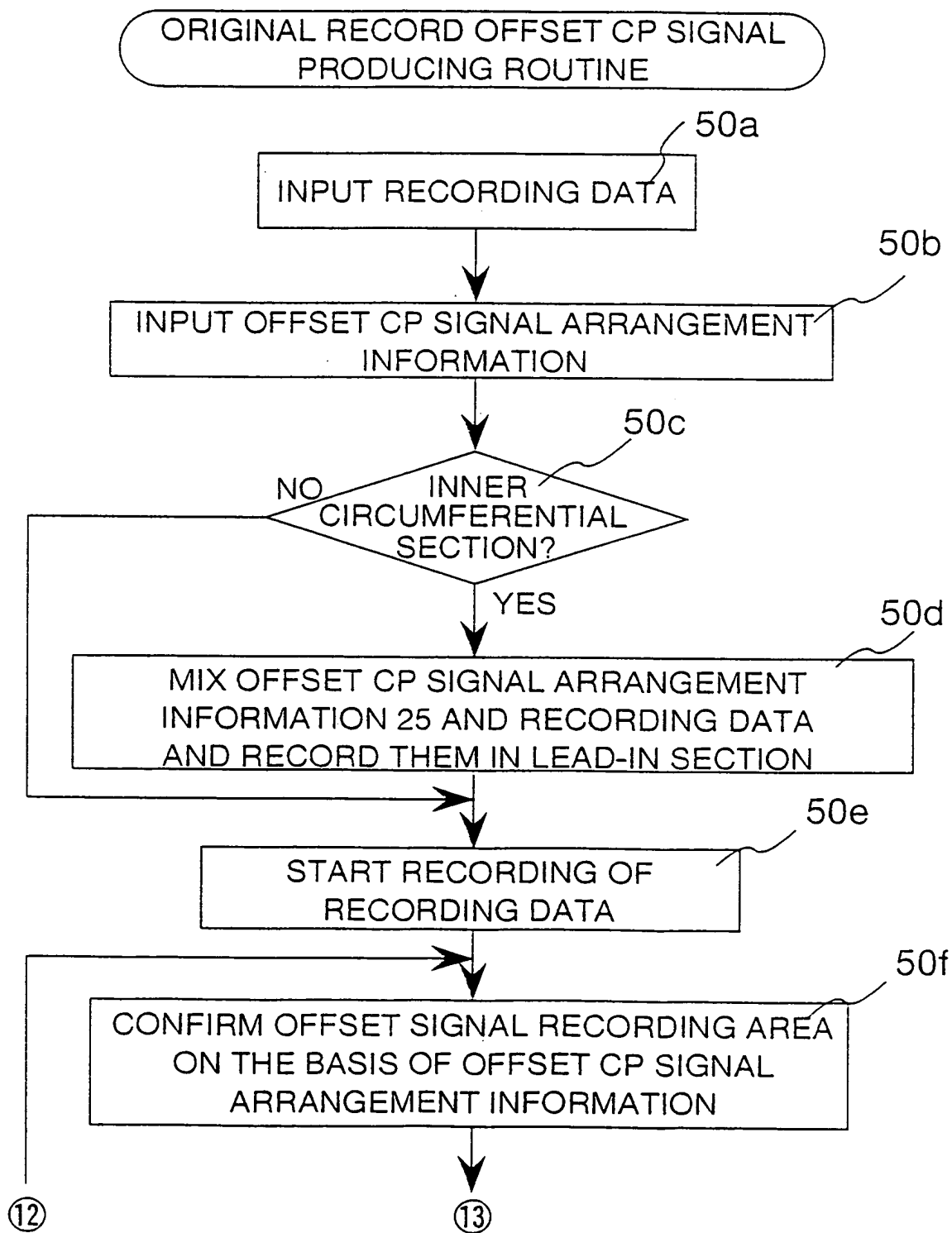


FIG. 19B

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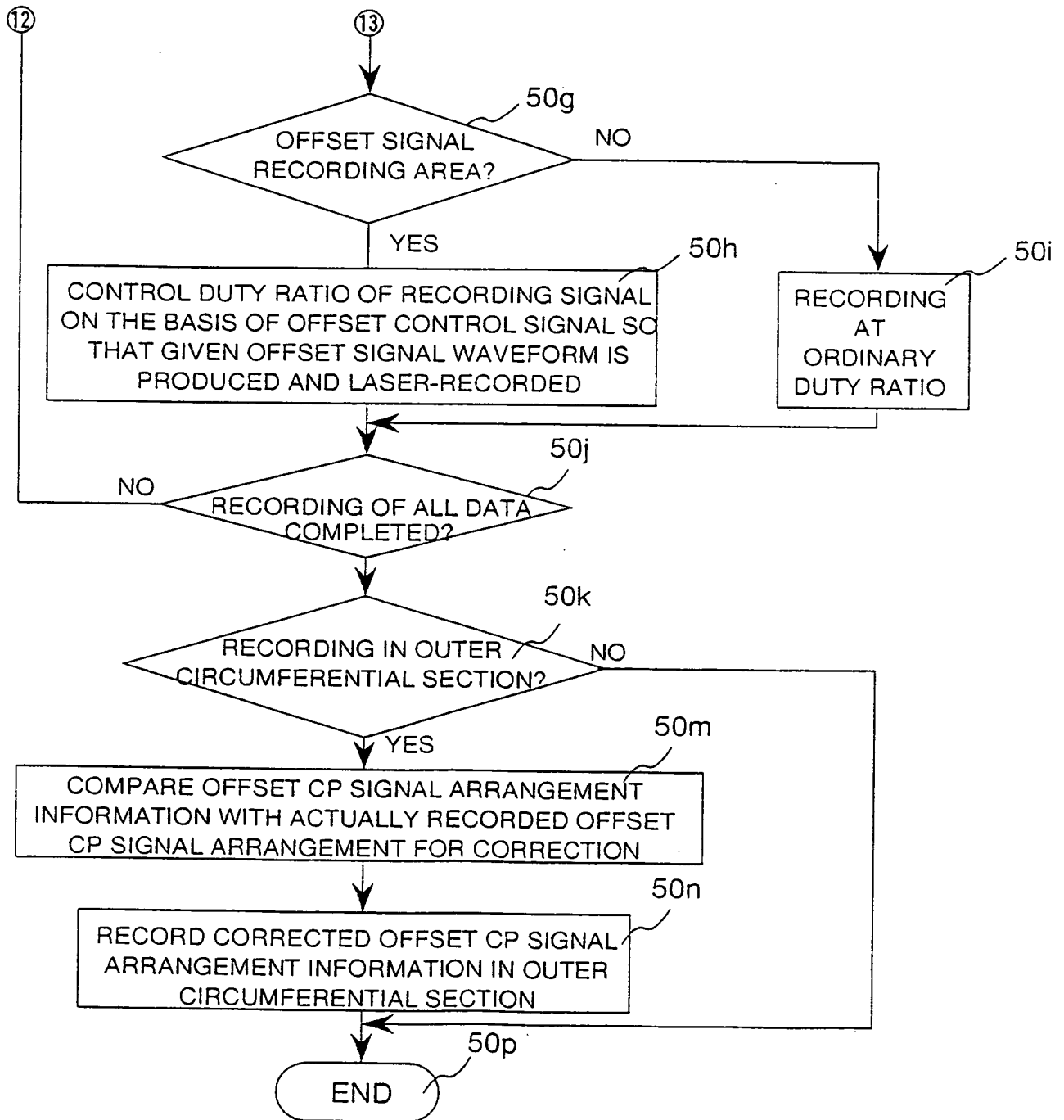


FIG. 20

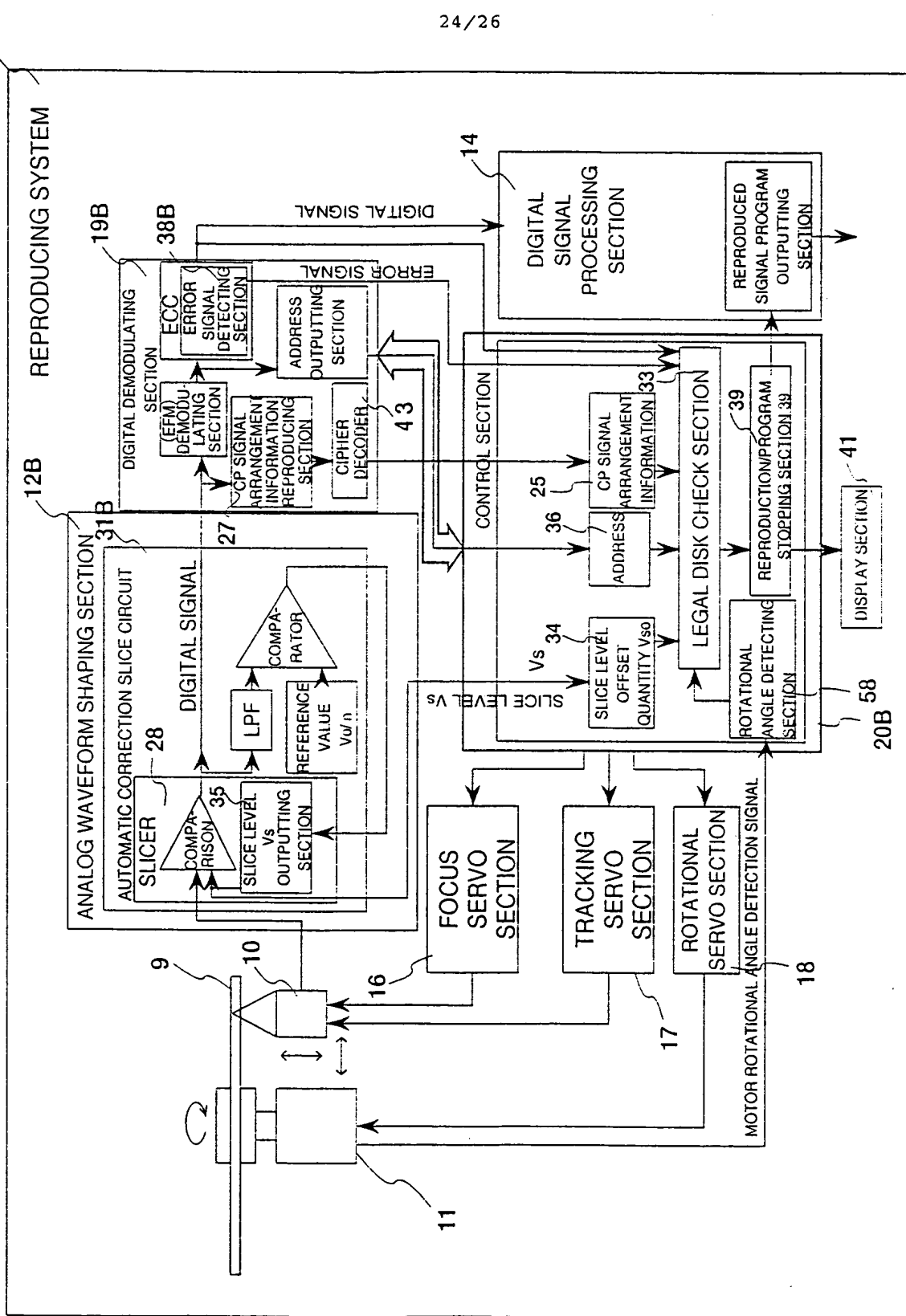


FIG. 21A

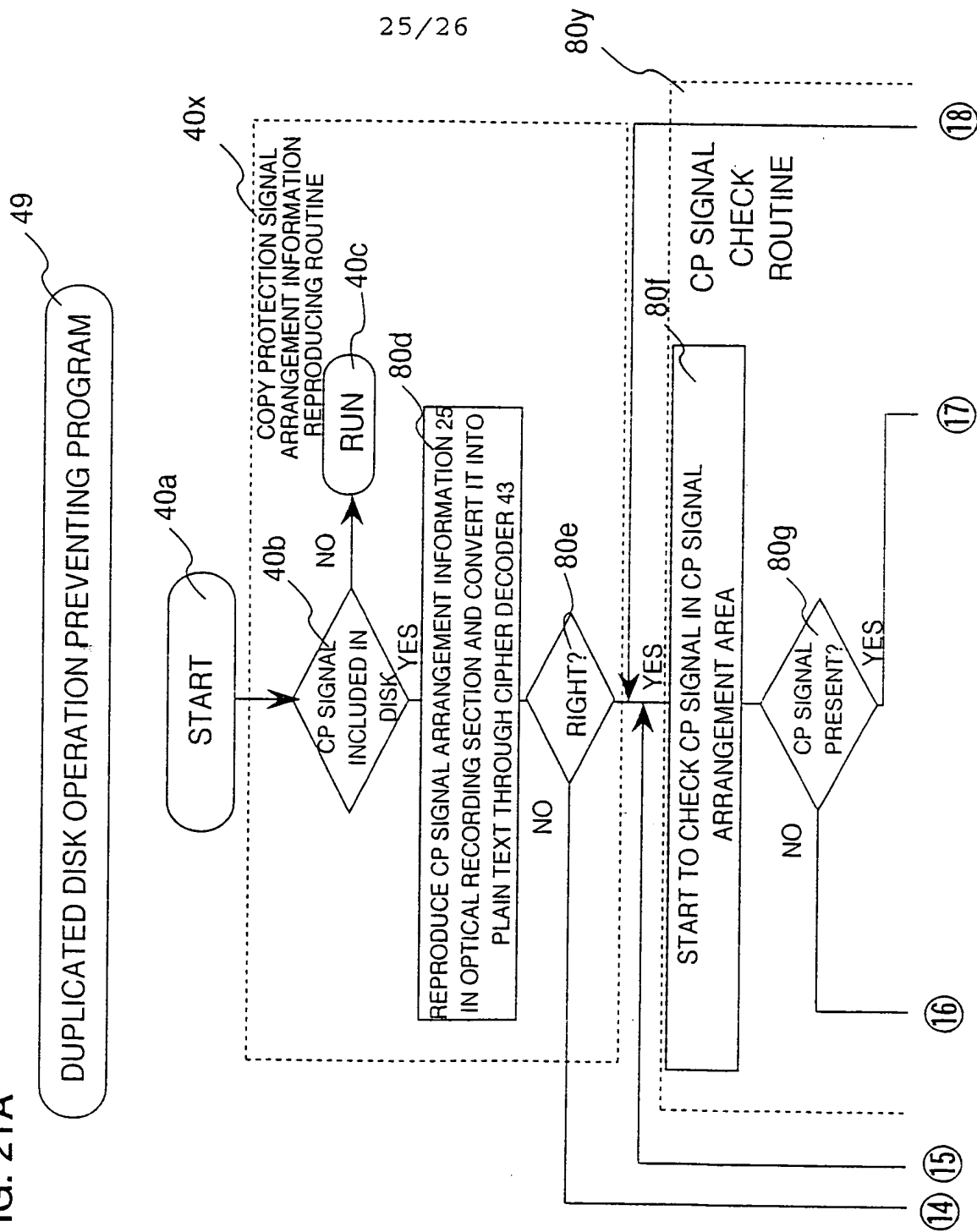


FIG. 21B

